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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/807,010      | 03/23/2004  | Eric Franzoi         | 6674-0085-1         | 2809             |

50811 7590 03/13/2007  
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| EXAMINER |
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MAYES, MELVIN C

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| ART UNIT | PAPER NUMBER |
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1734

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 03/13/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|                              |  |                                       |  |
|------------------------------|--|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/807,010   | <b>Applicant(s)</b><br>FRANZOI ET AL. |  |
|                              | <b>Examiner</b><br>Melvin Curtis Mayes | <b>Art Unit</b><br>1734               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 14,16-18 and 25-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14,16-18,25 and 27 is/are rejected.
- 7) ☒ Claim(s) 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

(1)

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

(2)

Claim 27 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for smaller particles silica gel of mean particle diameter of approximately one-half that of the larger particles of alumina, does not reasonably provide enablement for larger particles of alumina of mean particle size of approximately 30-35 microns and smaller particles of silica gel. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

According to the specification and original claims, when the mean particle size of alumina particles is 30-35 microns, the mean particle size of silica gel particles is approximately one-half that of the alumina particles. According to the specification, at this size the silica gel is used as packing agent to fill between alumina particles, which permits reduction of the quantity of alumina particles and at the same time providing a smoother overcoating. Claim 27 originally depended from Claim 26 but as now amended does not include the limitations of Claim 26 and is thus broader in scope than the original claim and the scope of support provided by the original specification.

(3)

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

(4)

Claims 16 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 16 and 17 now claim "said printed pattern being adhered to said surface..." Does this mean that the décor paper is provided with the printed pattern before impregnating with solution containing mordant, as claimed in Claim 16, or by mordant, as claimed in Claim 17? Are claims 16 and 17 now limited to treating pre-printed paper with mordant? According to the specification, unprinted or pre-printed paper is treated with a solution of mordant by immersion or coating, or pre-printed paper is impregnated with mordant added to a thermosetting solution. Until made clear, the claims are interpreted to impregnating or treating with mordant either unprinted or pre-printed paper.

Claim 16 recites the limitation "said décor sheet" in line 4. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

(5)

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

(6)

Claims 14, 16-18 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 592 013 in view of Birchall et al. 3,839,078.

EP '013 disclose a method of making an decorative laminate comprising: providing a printed pattern cellulose paper; impregnating the paper with a thermosetting resin; coating the impregnated paper with small hard particles such as alumina; and laminating the paper to a base layer (substrate) (entire document). EP '013 do not disclose adhering the printed pattern to the cellulose paper by a mordant.

Birchall et al. teach that cellulosic substrates such as paper are impregnated with aluminum phosphate for various reasons such as to improve the printability thereof. Birchall et al. teach that aluminum phosphate solution can be applied to the substrate by either spraying or by impregnation of the solution with surface tension lowering additive such as organic polymer of epoxide polymer or phenoxy resin (thermosettable resins) in solvent (col. 2, lines 1-54, col. 17, line 60 – col. 18, line 46).

It would have been obvious to one of ordinary skill in the art to have modified the method of EP '013 for making a decorative laminate having printed cellulose paper by also coating or impregnating the paper with an aluminum phosphate solution before printing the paper, as taught by Birchall et al., to improve the printability of cellulose paper. By providing the

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paper as sprayed with or impregnated with aluminum phosphate, the printed pattern is obviously adhered to the paper by a mordant of aluminum phosphate before impregnating with the thermosetting resin, as claimed.

Incorporating the aluminum phosphate to be impregnated into the cellulose paper in a solution of a thermosettable resin, as claimed in Claim 16, would have been obvious to one of ordinary skill in the art, as Birchall et al. teach that the aluminum phosphate solution is provided with surface tension lowering additive such as organic polymer of thermosettable epoxide or phenoxy resin. By impregnating the paper with aluminum phosphate solution containing thermosettable epoxide or phenoxy resin before printing and impregnating with a thermosetting resin, the pattern to be printed in the paper is obviously adhered to the paper surface by a mordant by impregnating with a thermosetting solution containing the mordant, as claimed in Claim 17.

***Allowable Subject Matter***

(6)

Claim 26 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Response to Arguments*

(7)

Applicant's arguments filed December 22, 2006 have been fully considered but they are not persuasive.

Applicant argues that there is no motivation to combine the references of EP'013 and Birchall et al. '078. Applicant argues that EO '013 discloses rotary screen and photogravure printing while '078 patent does not address any specific type of printing process, thus the stated motivation does not constitute a proper suggestion to combine the references. Applicant argues that '078 Patent does not teach incorporating the mordant in an impregnating solution of a thermosettable resin.

(8)

Birchall et al. '078 teaches to impregnate cellulosic paper with aluminum phosphate to improve the printability thereof. Regardless of the particular printing processes disclosed by EP '013 to print cellulose paper, the advantage of improved printability of cellulose paper as taught by '078 is pertinent and sufficient suggestion to use impregnation of the cellulose paper with aluminum phosphate to improve the printability of the paper in the method of EP '013. With respect to impregnation with mordant in a thermosettable resin solution, Claim 16 does not require that this impregnation with mordant is after printing nor require that this thermosettable resin is the thermosettable resin used to impregnate the paper after printing. As set forth, Birchall et al. teach impregnating using an aluminum phosphate solution containing a solution of surface tension lowering additive such as organic polymer of epoxide polymer or phenoxy resin in

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solvent, which is mordant incorporated in an impregnating solution of a thermosettable resin, as claimed.

***Conclusion***

(9)

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

(10)

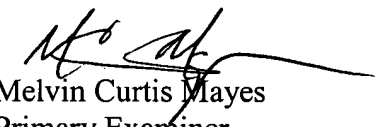
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin Curtis Mayes whose telephone number is 571-272-1234. The examiner can normally be reached on Mon-Fri 7:30 AM - 4:00 PM.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla can be reached on 571-272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Melvin Curtis Mayes  
Primary Examiner  
Art Unit 1734

MCM  
March 6, 2007